

ABSTRACT OF THE DISCLOSURE

The disclosed invention is a composition for and a method of treating a *Flaviviridae* (including BVDV and HCV), *Orthomyxoviridae* (including Influenza A and B) or *Paramyxoviridae* (including RSV) infection, or conditions related to abnormal cellular proliferation, in a host, including animals, and especially humans, using a nucleoside of general formula (I) – (XXIII) or its pharmaceutically acceptable salt or prodrug.

This invention also provides an effective process to quantify the viral load, and in particular BVDV, HCV or West Nile Virus load, in a host, using real-time polymerase chain reaction ("RT-PCR"). Additionally, the invention discloses probe molecules that can fluoresce proportionally to the amount of virus present in a sample.